

Claims

1 1. A wireless local area network station comprising signal processing means,
2 carrier detect sensing means, defer behavior sensing means and memory, the network
3 station being adapted to:
4 - transmit and receive signals within a communication cell associated with an
5 access point, the communication cell being associated with a carrier detect zone and a
6 defer zone, and to
7 - carry out an association process between the network station and the access point
8 by transmitting an association request message to the access point and receiving an
9 association response message from the access point during entry of said network station
10 into said communication cell, the network station is coupled to the access point to receive
11 a preferred carrier detect threshold level value and preferred defer behavior threshold
12 level value and store in the memory in preferred carrier detect threshold level value and
13 preferred defer behavior threshold level value for use during transmission and reception
14 of signals while being associated with the access point.

1 2. The arrangement of claim 1, wherein the preferred carrier detect threshold level
2 value and preferred defer behavior threshold level value are received as part of the
3 association response message.

1 3. The arrangement of claim 1, wherein the preferred carrier detect threshold level
2 value and preferred defer behavior threshold level value are received after the association
3 response message.

1 4. The arrangement of claim 3, wherein the network station is arranged to vary
2 said preferred carrier threshold level value and the preferred defer behavior threshold
3 level value after having stored them.

1 5. The arrangement of claim 4, wherein the network station is arranged to
2 disassociate from the access point and associate with another access point.

1 6. A wireless local area network access point comprising signal processing means
2 and a memory, the access point being adapted to:
3 - transmit and receive signals within a communication cell associated with the
4 access point and with a carrier detect zone and a defer zone to

5 - carry out an association process between the access point and a network station by
6 transmitting an association response message to the network station in reply to receipt of
7 an association request message from the network station during entry of the network
8 station into the communication cell, the access point is coupled to the memory to
9 - read a preferred carrier detect threshold level value and preferred defer behavior
10 threshold level value after having received the association request message, and to
11 transmit to the network station the preferred carrier detect threshold level value and
12 preferred defer behavior threshold level value.

1 7. An access point of claim 6, further comprising carrier detect sensing means and
2 defer behavior sensing means, where the memory is coupled to store an access point
3 carrier detect threshold level value and an access point defer behavior threshold level
4 value for use by the access point during communicating with a network station and that is
5 lower than the preferred carrier detect threshold level value and preferred defer behavior
6 threshold level value.

1 8. A method of communicating by a wireless local area network station
2 comprising the steps of:

3 - transmitting and receiving signals within a communication cell associated with an
4 access point, the communication cell being associated with a carrier detect zone and a
5 defer zone,
6 - carrying out an association process between the network station and the access
7 point by transmitting an association request message to the access point and receiving an
8 association response message from the access point during entry of the network station
9 into said communication cell,
10 - receiving a preferred carrier detect threshold level value and preferred defer
11 behavior threshold level value from the access point; and
12 - storing the preferred carrier detect threshold level value and preferred defer
13 behavior threshold level value in the memory of the network station for use during
14 transmission and reception of signals while being associated with the access point.

1 9. A method of operating a wireless local area network station comprising the
2 steps of:

- 3 - transmitting and receiving signals within a communication cell associated with an
- 4 access point, the communication cell being associated with a carrier detect zone and a
- 5 defer zone, and
- 6 - carrying out an association process between the network station and the access
- 7 point by transmitting an association request message to the access point and receiving an
- 8 association response message from the access point during entry of the network station
- 9 into the communication cell,
- 10 - receiving a preferred carrier detect threshold level value and preferred defer
- 11 behavior threshold level value from said access point;
- 12 - storing said preferred carrier detect threshold level value and preferred defer
- 13 behavior threshold level value in the memory of the network station for use during
- 14 transmission and reception of signals while being associated with the access point.

1 10. A method of communicating by a wireless local access network access point

2 comprising the steps of:

- 3 - transmitting and receiving signals within a communication cell associated with
- 4 the access point, the communication cell being associated with a carrier detect zone and
- 5 a defer zone,
- 6 - carrying out an association process between the access point and a network station
- 7 by transmitting an association response message to the network station in reply to
- 8 receiving an association request message from the network station during entry of said
- 9 network station into the communication cell,
- 10 - reading a preferred carrier detect threshold level value and preferred defer
- 11 behavior threshold level value from the memory after having received the association
- 12 request message, and
- 13 - transmitting the preferred carrier detect threshold level value and preferred defer
- 14 behavior threshold level value to the network station.

1 11. A method of operating a wireless local access network access point

2 comprising the steps of:

- 3 - transmitting and receiving signals within a communication cell associated with
- 4 the access point, the communication cell being associated with a carrier detect zone and
- 5 a defer zone,

- 6 - carrying out an association process between the access point and a network station
- 7 by transmitting an association response message to the network station in reply to
- 8 receiving an association request message from the network station during entry of said
- 9 network station into said communication cell,
- 10 - reading a preferred carrier detect threshold level value and preferred defer
- 11 behavior threshold level value from the memory after having received the association
- 12 request message, and
- 13 - transmitting the preferred carrier detect threshold level value and preferred defer
- 14 behavior threshold level value to the network station.

1 12. A wireless local area network station comprising signal processing means,
2 carrier detect sensing means, defer behavior sensing means and a memory for storing a
3 carrier detect threshold level value and a defer behavior threshold level value for use
4 during transmission and reception of signals while being associated with an access point
5 where the network station is adapted to transmit and receive signals within a
6 communication cell associated with the access point associated with a carrier detect zone
7 and a defer zone, and the network station is adapted to carry out an association process
8 with the access point by transmitting an association request message to the access point
9 and receiving an association response message from the access point during entry of said
10 network station into said communication cell, and amend at least one of said carrier
11 detect threshold level value and said defer behavior threshold level value during
12 operation.